IN THE CLAIMS

Claim 1 (Previously Presented): An SP-C analog having the following general formula:

 $F_eG_fIPSSPVHLKR(X_aB)_n(X_bB)_nX_cBX_dGALLMGL$

wherein:

X is an amino acid selected from the group consisting of I, L, and Nle (norleucine);

B is an amino acid selected from the group consisting of K,W,F, Y, and Ornithine;

a is an integer from 1 to 19;

b is an integer from 1 to 19;

c is an integer from 1 to 21;

d is an integer from 0 to 20;

e = f = 0 or 1;

n is 0 or 1; and

wherein:

(X_aB)_n(X_bB)_nX_cBX_d is a sequence having a maximum of 22 amino acids.

Claim 2 (Previously Presented): An SP-C analog according to Claim 1, having formula (Ia):

FGIPSSPVHLKRX4BX4BX4BXGALLMGL (SEQ ID NO: 2).

Claim 3 (Previously Presented): An SP-C analog according to Claim 1, having formula (Ib):

FGIPSSPVHLKRX5BX5BX4GALLMGL (SEQ ID NO: 3).

Application No. 09/926,009 Amendment Under 37 CFR 1.312

Claim 4 (Previously Presented): An SP-C analog according to Claim 1, having formula (Ic):

FGIPSSPVHLKRX₄BX₁₁GALLMGL (SEQ ID NO: 4).

Claim 5 (Previously Presented): An SP-C analog according to Claim 1, having formula (Id):

FGIPSSPVHLKRX₈BX₇GALLMGL (SEQ ID NO: 5).

Claim 6 (Previously Presented): An SP-C analog according to Claim 1, having formula (Ie):

FGIPSSPVHLKRX₁₁BX₄GALLMGL (SEQ ID NO: 6).

Claim 7 (Previously Presented): An SP-C analog according to Claim 1, in which the Ser residues are acylated.

Claim 8 (Previously Presented): An SP-C analog according to Claim 1, in which B is Lysine or Phenylalanine.

Claim 9 (Currently Amended): An SP-C analog according to Claim 8, selected from the group consisting of:

SP-C (LKS) FGIPSSPVHLKRLLILKLLLKILLKLGALLMGL (SEQ ID NO: 7); SP-C (LKS)₁ FGIPSSPVHLKRLLILKLLLLKLLLIKLLILGALLMGL (SEQ ID NO: 8); SP-C (LKS)₂ FGIPSSPVHLKRLLILKLLLLLLLLLLLLGALLMGL (SEQ ID NO: 9); SP-C (LKS)₃ FGIPSSPVHLKRLLILLLLLLLLLLLLLGALLMGL (SEQ ID NO: 10); SP-C (LKS)₃ FGIPSSPVHLKRLLILLLLLLLLLLLLLLLGALLMGL (SEQ ID NO: 10); SP-C (LKS)₄ FGIPSSPVHLKRLLILLLLLLLKLLIKGALLMGL (SEQ ID NO: 11); and

SP-C (LFS) FGIPSSPVHLKRLLILFLLLLFILLLFLGALLMGL (SEQ ID NO: 12).

Claim 10 (Previously Presented): A synthetic surfactant comprising at least one SP-C analog of Claim 1 in admixture with at least one lipid and/or phospholipid.

Claim 11 (Previously Presented): A synthetic surfactant according to Claim 10, in which said lipids and/or phospholipids comprise DPPG, PG, and/or PA.

Claim 12 (Previously Presented): A synthetic surfactant according to Claim 10, further comprising SP-B or an active derivative thereof, or a polymyxin.

Claim 13 (Previously Presented): A synthetic surfactant according to Claim 10, in the form of a solution, dispersion, suspension, or a dry powder.

Claims 14-16 (Canceled).

Claim 17 (Previously Presented): The SP-C analogue of Claim 1 wherein the $(X_aB)_n(X_bB)_nX_cBX_d$ sequence has from 10 to 22 amino acids.

Claim 18 (Previously Presented): The SP-C analogue of Claim 7, wherein the Ser residues are acylated with palmitoyl groups.

Claim 19 (Previously Presented): A pharmaceutically active synthetic surfactant comprising the SP-C analog of Claim 1.

Claim 20 (Previously Presented): A method of treating a surfactant deficiency comprising administering an effective amount of the SP-C analog of Claim 1 to a subject in need thereof.

Claim 21 (Previously Presented): A pharmaceutically active synthetic surfactant comprising the surfactant of Claim 10, wherein said surfactant comprises polymyxin.

Claim 22 (Previously Presented): A pharmaceutically active synthetic surfactant comprising the surfactant of Claim 10, wherein said surfactant comprises polymyxin B.

Claim 23 (Previously Presented): A method of treating surfactant deficiencies or dysfunction, or serious otitis media, comprising administering an effective amount of the surfactant of Claim 10 to a subject in need thereof, wherein said surfactant comprises polymyxin.

Claim 24 (Previously Presented): A method of treating a surfactant deficiency or dysfunction, or serious otitis media, comprising administering to a subject in need thereof an effective amount of the surfactant of Claim 10 wherein said surfactant comprises polymyxin B.

Claim 25 (Previously Presented): The method of Claim 20, wherein said subject has respiratory distress syndrome.

Claim 26 (Previously Presented): The method of Claim 23, wherein said subject has respiratory distress syndrome.

Claim 27 (Previously Presented): The method of Claim 24, wherein said subject has respiratory distress syndrome.

Claim 28 (Previously Presented): The SP-C analog of Claim 1, wherein B is selected from the group consisting of K and F.

Claim 29 (Previously Presented): The SP-C analog of Claim 1, wherein X is selected from the group consisting of I and L.

Claim 30 (Previously Presented): The SP-C analog of Claim 1, wherein B is selected from the group consisting of K and F; and X is selected from the group consisting of I and L.

Claim 31 (Previously Presented): A pharmaceutically active synthetic surfactant comprising the surfactant of Claim 10, wherein said surfactant of Claim 10 contains at least one phospholipid selected from the group consisting of DPPC and PG.

Claim 32 (Previously Presented): A method of treating a surfactant deficiency or dysfunction or serious otitis media, comprising:

administering to a subject in need thereof an effective amount of the surfactant of Claim 10, wherein said surfactant of Claim 10 contains at least one phospholipid selected from the group consisting of DPPC and PG.

Application No. 09/926,009
Amendment Under 37 CFR 1.312

Claim 33 (Previously Presented): The SP-C analog of Claim 1, which does not give rise to self-oligomerization.

Claim 34 (Previously Presented): The SP-C analog of Claim 1, which folds like the native peptide and interacts with surfactant lipids.